

Amendments to the Specification:

Please replace Paragraph [0006] (the first full paragraph on page 4) with the following rewritten paragraph:

[0006] The technique proposed in this cited reference multiplies each numerical value computed by interpolation by a predetermined coefficient in an area having the high accuracy required for the image data to be stored in the LUT and stores the multiplied value in the LUT. When the rounding process rounds off the figures after the decimal point in storage of each numerical value, for example, the proposed technique ~~decouples~~ decouples the numerical value prior to storage. The numerical value thus keeps the accuracy of one decimal place. This technique ~~decouples~~ decouples the numerical value and converts a small numerical variation in the first place after the decimal point, which is expected to be rounded in storage, into a non-rounded significant numerical variation. The stored tenfold numerical value is read out and is returned to 1/10 at any adequate timing.

Please replace Paragraph [0024] (the third full paragraph on page 10) with the following rewritten paragraph:

[0024] In many cases, for example, in the case of printing color image data, the image data expressed in the RGB color system are to be converted into ~~image~~ image data expressed in the CMY color system. In the image processing apparatus and the image processing method of the invention, conversion of the image data expressed in the RGB color system into image data expressed in the CMY color system is advantageously usable for various purposes.

Please replace Paragraph [0054] (the paragraph that spans pages 17 and 18) with the following rewritten paragraph:

[0054] An ink cartridge 242 containing K ink and an ink cartridge 243 containing multiple color inks, that is, C ink, M ink and Y ink, are attached to the carriage 240. Attachment of the ink cartridges 242 and 243 to the carriage 240 causes the respective color inks contained in the cartridges 242 and 243 to ~~be flown~~ flow through corresponding ink conduits (not shown) and be fed to ink ejection heads 244 through 247 for the corresponding color inks, which are provided on the bottom face of the print head assembly 241. Each of the ink ejection heads 244 through 247 for the respective color inks has a nozzle array of 48 nozzles, which are arrayed at a fixed nozzle pitch k.

Please replace Paragraph [0056] (the second full paragraph on page 18) with the following rewritten paragraph:

[0056] Any of diverse methods may be applied to eject ink droplets from the ink ejection heads 244 ~~through~~ 247 through 247 of the respective color inks. One applicable method utilizes piezoelectric elements to eject ink. Another applicable method uses heaters located in ink conduits to produce bubbles in the ink conduits and thereby eject ink droplets. The inkjet printer may be replaced by a printer that takes advantage of thermal transfer to form ink dots on a printing medium or by a printer that takes advantage of static electricity to make toner powders of respective colors adhere to a printing medium.

Please replace Paragraph [0058] (the paragraph that spans pages 19 and 20) with the following rewritten paragraph:

[0058] Fig. 4(b) shows the principle of varying the size of an ejected ink droplet by regulating the waveform of the voltage applied to the piezoelectric element PE. The process first applies a negative voltage to the piezoelectric element PE to suck ink from the ink gallery 257 into the ink chamber 256 and subsequently applies a positive voltage to the piezoelectric element PE to reduce the volume of the ink chamber 256 and thereby make an ink droplet I_p ejected from the nozzle N_z . An adequate ink suction speed causes an inflow of ink corresponding to the volume variation of the ink chamber 256. A higher ink suction speed, however, makes a delay in ink flow from the ink gallery 257 into the ink chamber 256, due to the resistance of the conduit between the ink gallery 257 and the ink chamber 256. The ink is accordingly ~~flow~~ flows back from the ink conduit 255 into the ink chamber 256 to significantly ~~thrust back~~ retract the ink interface at the outlet of the nozzle N_z . In the graph of Fig. 4(b), a voltage waveform 'a' shown by the solid line represents a waveform for ink suction at an adequate speed, while a voltage waveform 'b' shown by the ~~broken~~ dashed line represents a waveform for ink suction at a higher speed than the adequate speed.

Please replace Paragraph [0059] (the first full paragraph on page 20) with the following rewritten paragraph:

[0059] In the state of a sufficient supply of ink into the ink chamber 256, application of a positive voltage to the piezoelectric element PE causes an ink droplet Ip of a certain volume corresponding to the volume reduction of the ink chamber 256 to be ejected from the nozzle Nz. In the state of an insufficient supply of ink into the ink chamber 256 to significantly ~~thrust back~~ retract the ink interface, on the other hand, application of a positive voltage to the piezoelectric element PE reduces the size of an ejected ink droplet. The color printer 200 of this embodiment regulates the waveform of the negative voltage applied to the piezoelectric element PE to vary the ink suction speed and thereby vary the size of an ink droplet ejected from the nozzle Nz. There are two variable-size dots, a large-size dot and a small-size dot, formed by the color printer 200 of the embodiment.

Please replace Paragraph [0062] (the second full paragraph on page 21) with the following rewritten paragraph:

[0062] Fig. 5 is a flowchart showing an image processing routine, which is executed by the computer 100 functioning as the image processing apparatus of the embodiment ~~to make that subjects~~ input image data subjected to a series of image processing and thereby ~~generate~~ generates resulting print data. This image processing routine starts when the operating system of the computer 100 activates the printer driver 12.

Please replace Paragraph [0096] (the first full paragraph on page 37) with the following rewritten paragraph:

[0096] For the purpose of reference, a ~~curve of broken~~ curved, dashed line is given in Fig. 16(b) to represent a map of the R tone value to the C tone value (a color conversion characteristic curve) under application of ideal color conversion. The closed circles are all located in the vicinity of this ~~broken line curve~~ curved, dashed line. Color conversion with reference to the reconstructed LUT accordingly gives equivalent results to those obtained by the ideal color conversion. When the reconstructed LUT has some rounding errors due to the insufficient resolution, the encoding process is carried out as described above to ensure color conversion with sufficient accuracy.

Please replace Paragraph [0101] (the first full paragraph on page 39) with the following rewritten paragraph:

[0101] Fig. 17(a) shows an encoded color conversion table and an intermediate color conversion table (intermediate table) generated by decoding the encoded color conversion table. A curve of solid line conceptually shows the encoded color conversion table. Open circles on the solid-line curve conceptually show storage of encoded C tone values against R tone values at respective lattice points in the encoded color conversion table. The encoded color conversion table shown in Fig. 17(a) is identical with the color conversion table of Fig. 16(c). Decoding of this color conversion table gives the intermediate table shown by a ~~curve of broken~~ curved, dashed line in Fig. 17(a). Decoded C tone values, which are obtained by decoding the C tone values stored at the lattice points of the open circles in the encoded color conversion table, are stored at respective lattice points in the intermediate table. Open circles ~~of broken~~ the dashed line on the ~~broken-line curve~~ curved, dashed line conceptually show storage of the decoded C tone values at the respective lattice points in the intermediate table.

Please replace Paragraph [0109] (the paragraph that spans pages 42 and 43) with the following rewritten paragraph:

[0109] The modified dot density data conversion process is similar to the dot density data conversion process adopted in the first embodiment. The dot density data conversion process of the first embodiment refers to the dot density table shown in Fig. 11 to convert the image data into dot density data with respect to each of the four colors C, M, Y, and K. Similarly the modified dot density data conversion process of the second embodiment refers to a modified dot density table shown in Fig. 13 to convert the encoded image data into decoded dot density data. In the graph of Fig. 13, a thick ~~broken-line curve~~ curved, dashed line represents a modified dot density table with respect to the small-size dot, while a thick solid-line curve represents a modified dot density table with respect to the large-size dot. For the purpose of reference, the dot density table with respect to the small-size dot and the dot density table with respect to the large-size dot are shown by a thin ~~broken~~ dashed line and a thin solid line in Fig. 13. The modified dot density table converts image data into dot density data of smaller values, compared with the dot density table, as clearly shown in Fig. 13. In an area of small tone values, the data set in the modified dot density table of the second embodiment (shown by the thick dashed line) have smaller values than the data set in the dot density table of the first embodiment (shown by the thin dashed line). In an area of intermediate tone values (for example, in the vicinity of a tone value '100'), no dots are formed in the modified dot density

table (shown by the thick solid line) with respect to the large-size dot, while the data set in the modified dot density table are greater than the data set in the dot density table with respect to the small-size dot. In this intermediate area, the modified dot density table accordingly gives dot density data of smaller values.

Please replace Paragraph [0118] (the paragraph that spans pages 46 and 47) with the following rewritten paragraph:

[0118] When the modified dot density table setting routine starts, the printer driver 12 first selects an object tone value as an object, corresponding to which modified dot density data is set (step S400). The object tone value is a coordinate value on the abscissa in the modified dot density table of Fig. 13. In this embodiment, each tone value is expressed as ~~1-byte~~ 1-byte data. The object tone value accordingly takes an integral value in a range of 0 to 255. The printer driver 12 then reads dot density data corresponding to the selected object tone value from the dot density table and stores the dot density data (step S402).